



Express Mailing Label No. EV 460179815 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/655,904
Applicant : James D. Parsons
Filed : Sept. 5, 2003
TC/A.U. : 2884
Examiner : Otilia Gabor
Docket No. : 378-21-034
Customer No. : 23935

Title: ACOUSTIC ABSORPTION RADIATION SENSING IN SiC

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

The argument presented in the Examiner's Answer up to page 6, line 7 restates the reasons for rejection set forth in the Final Office action. Since this was addressed in the Appeal Brief, it will not be discussed further in this Reply Brief.

Beginning at page 6, line 7, dealing with claim 7 on the thickness of the SiC body being uniform and claim 8 on the SiC body having a flat radiation receiving surface, the Examiner's Answer contends that a circular body as disclosed by the Ichikawa reference has a uniform thickness and is also flat. In addition to the argument presented in the Appeal Brief that the commonly accepted meanings of "flat" and "uniform thickness" would exclude a circular body, applicant's specification also makes it clear that a "flat" SiC body having a "uniform thickness" would not be satisfied by the circular body of Ichikawa.

Page 4, lines 19-24 of the application states:

"The amount of acoustic absorption progressively increases as the SiC thickness increases above the threshold of about 200 micrometers, and approaches a maximum absorption level at about 2,000 micrometers thickness. A preferred thickness range is about 400-2,000 micrometers."

Page 6, lines 30-35 states:

"The thickness of the SiC body 6 is preferably at least approximately uniform with a major surface facing the beam 4 that is at least approximately flat. This provides for an acoustic absorption that is at least approximately uniform over a cross-section of the SiC body parallel to its major flat surface." (referring to FIG. 1.)

Contrary to this description in the specification of achieving "an acoustic absorption that is at least approximately uniform", the circular body of Ichikawa would not exhibit a uniform acoustic absorption over a cross-section of the SiC body parallel to any major flat surface. In fact, the circular Ichikawa body has no "major flat" surface such as the large area flat surface facing the beam in illustrative FIG. 1. Rather, since the maximum disclosed or suggested diameter for the circular body of Ichikawa is 200 micrometers, and appellant's specification makes clear that a useful acoustic absorption mechanism can be obtained from single crystal SiC if "its thickness is at least about 200 micrometers", the circular Ichikawa body would at best exhibit only a very low level of acoustic absorption along a diameter parallel to the irradiating beam (see specification page 4, lines 7-12). At all other points

in the Ichikawa body off the beam-parallel diameter, where the thickness of the body progressively parallel to the beam reduces the further one moves away from the beam-parallel diameter, the beam-parallel thickness of the body would be less than 200 micrometers.

The circular Ichikawa body will thus at best exhibit acoustic absorption only along a center diameter parallel to the beam, with no observable acoustic absorption at other locations. Even if some slight acoustic absorption were observed in the area of the beam-parallel diameter, it would progressively diminish away from that diameter because of the progressive reduction in the thickness of the body away from the beam-parallel diameter. Thus, any attempt to define the circular body of Ichikawa as being "flat" and having a "uniform thickness" would directly contradict the description of these qualities given in the specification itself as resulting in "an acoustic absorption that is at least approximately uniform".

Request for Refund of Excess Fees

Appellant feels he has been overcharged in connection with this appeal, and requests a refund.

Fee for Filing Notice of Appeal

Appellant paid the (small entity) Notice of Appeal and Appeal Brief fees in connection with the original Notice of Appeal filed September 12, 2005 and the Appeal Brief filed November 4, 2005. The Examiner thereafter reopened prosecution with a new Final Office Action dated December 1, 2005, which corrected for an error in the original Final Action that was noted in appellant's original appeal brief, and also for an omission in

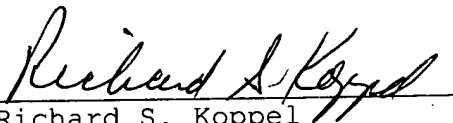
stating a reason for the rejection of certain dependant claims in the original Final Action.

The undersigned was advised by the Office that the proper procedure would be to file a new appeal in response to the new Final Office Action, and this was done on January 9, 2006. At the same time Appellant filed a request for a waiver of additional appeal fees since the need to file a new Notice of Appeal and Appeal Brief arose through errors on the part of the Office, and the original appeal had not yet been considered by the Board. However, the undersigned's Deposit Account was charged a second Notice of Appeal fee on January 12, 2006.

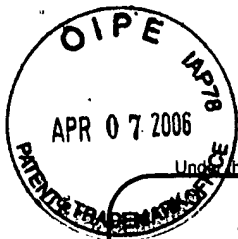
2) An Amendment filed January 9, 2006, the same day as the second Notice of Appeal and Appeal Brief, amended dependant claim 6 to independent form and was accompanied by a check in payment of the extra independent claim fee. However, on January 18, 2006 the undersigned's Deposit Account was charged the fee for adding two excess independent claims, whereas only one independent claim had been added and had already been paid for.

Respectfully submitted,

Dated: 4/7/06


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(U:MR/RSK/Amendments/Reply Brief/378-21-034)



PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

7

Application Number

10/655,904

Filing Date

September 5, 2003

First Named Inventor

James D. Parsons

Art Unit

2884

Examiner Name

Otilia Gabor

Attorney Docket Number

378-21-034

ENCLOSURES (Check all that apply)

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/
Incomplete ApplicationReply to Missing Parts
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a
Provisional ApplicationPower of Attorney, Revocation
Change of Correspondence Address

Terminal Disclaimer



Request for Refund



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☐ Landscape Table on CD

After Allowance Communication to TC

Appeal Communication to Board
of Appeals and InterferencesAppeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



Status Letter

Other Enclosure(s) (please identify
below):

-Itemized Postcard

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

KOPPEL, PATRICK & HEYBL

Signature

Printed name

Richard S. Koppel

Date

4/7/06

Reg. No.

26,475

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Mariana M. Rivas

Date

4/7/06

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PTO
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).
FEE TRANSMITTAL
For FY 2006
APR 07 2006
☒ Applicant claims small entity status. See 37 CFR 1.27

Complete if Known

Application Number 10/655,904
Filing Date September 5, 2003
First Named Inventor James D. Parsons
Examiner Name Otilia Gabor
Art Unit 2884
Attorney Docket No. 378-21-034

TOTAL AMOUNT OF PAYMENT (\$) 0.00

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☒ Deposit Account Deposit Account Number: 11-1580 Deposit Account Name: Richard S. Koppel

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Fee (\$)			
Each claim over 20 (including Reissues)	50	25			
Each independent claim over 3 (including Reissues)	200	100			
Multiple dependent claims	360	180			
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	
_____ - 20 or HP = _____	x _____	= _____		Fee (\$)	Fee Paid (\$)
HP = highest number of total claims paid for, if greater than 20.					
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	_____	_____
_____ - 3 or HP = _____	x _____	= _____			
HP = highest number of independent claims paid for, if greater than 3.					

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

- 100 = / 50 = (round up to a whole number) x = Fees Paid (\$)

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge):

SUBMITTED BY		Registration No. 26,475	Telephone (805) 373-0060
Signature	<i>Richard S. Koppel</i>	(Attorney/Agent)	Date 4/7/06
Name (Print/Type)	Richard S. Koppel		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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